"Sir John Parsons states that he considers that this tumour is not malignant, and may have originated in an orbital dermoid.

Professor Loewenstein has sent me a lengthy report, with interesting suggestions as to further investigations, which unfortunately I cannot carry out, as neither the patient nor the tumour material are now available. He regards this as a melanotic tumour, of mixed cell type, displaying both ecto- and meso-dermal features. He has not seen or read in the literature of anything quite like it. He too, would not regard it as markedly malignant."

REMOVAL OF A NON-MAGNETIC FOREIGN BODY FROM THE VITREOUS*

BY

V. O'HEA-CUSSEN

CORK

THIS case is recorded because it is felt the technique employed, being different in many details from the usual procedure, may be of assistance to others who have to treat such cases, which at the present times are all too numerous.

History. Whilst mining for phosphates, the patient was involved in an explosion. A flying particle struck his left eye, causing immediate loss of sight in that eye. He was admitted to Eye, Ear and Throat Hospital on the day following the accident, namely December 12, 1943.

Condition on admission. Vision, R.E. 6/12; L.E. hand movements at one foot. Tension, R.E. N.; L.E. -1. The eye was moderately injected. A small central, perforating, and healed wound of the cornea was present. On dilatation of the pupil a posterior synechia was seen at 12 o'clock. A stellate opacity in the posterior layers of the lens prevented examination of the fundus. The lens opacity could be seen by oblique illumination, as well as by transillumination. Application of the giant magnet yielded no result.

Treatment. Atropine, and albucid drops; protein shock. An X-ray taken a few days later revealed the presence of a foreign body. The course it took to reach the vitreous appeared to be around the upper pole of the lens, inflicting en route a contusion on the lens capsule without perforating it.

By December 30, 1943, the lens opacity had entirely disappeared with corresponding improvement of vision to 6/60. The fundus could be seen fairly well, without trace of the foreign body. A few days later the foreign body was seen in the vitreous at 2 o'clock,

* Received for publication March 16, 1944.

just inside the margin of the pupil. With the passage of time it became more and more movable, and by January 13, 1944, when the patient looked to the right, it literally flew across the pupil in an inward, and downward direction, which fact suggested liquefaction of the vitreous. The extreme motility of the foreign body rendered further X-rays useless for the purpose of localisation, which had therefore to depend on clinical observations. The vertical position was easy as it never varied. The depth in the vitreous had to be estimated, but successive daily observations readily overcame this difficulty. The vision of the L.E. was now 6/24, and the eye had quietened down considerably. Nevertheless, it was felt that an attempt should be made to remove the foreign body, which was estimated to be 6 mm. long, before further changes took place in the vitreous. The facts were made known to the patient, who gave his consent to operation.

Operation, January 1, 1944. Pre-medication: Omnopon, and atropine. Injections of novo-zinol to paralyse the orbicularis and external rectus muscles. Cocaine anaesthesia. In a darkened theatre, with a Zeiss hammer lamp to illuminate the operation field, a flap of conjunctiva, and capsule was elevated. A suture was passed through its edges, so that it could be held out of the way. Immediately over the estimated position of the foreign body two sutures of London Hospital catgut with mounted needles were passed through the superficial layers of the sclera 2 mm. apart.

Using the belly of a cataract knife, an incision was made in the superficial layers of the sclerotic one quarter of an inch long between the sutures. With successive sweeps, this incision was deepened until the choroid was exposed. The operator holding one suture and the assistant the other, gentle vertical traction was made. Next, the choroid and retina were incised for the full length of the scleral incision. The light was now directed into the pupil, and the vitreous which was fairly well illuminated, was inspected in all directions. The foreign body was not visible, a very surprising fact. A Fischer-Arlt iris forceps was introduced into the vitreous and moved in various directions without feeling the foreign body. The forceps was withdrawn and another inspection was made. The foreign body was now seen near the anterior end of the incision, and about 2 mm. deep. It was easily removed by means of a narrow curette. The two scleral sutures were tied together, albucid 30 per cent. drops were instilled. The capsulo-conjunctival flap was replaced and sutured in position. Atropine, and albucid drops were given, and both eyes covered. The loss of vitreous was small; it was not more than two or three drops, and some liquefaction had taken place.

Examination of the foreign body showed it was a piece of stone, an exact cube on four sides, each 2 mm. square, the fifth and sixth sides were slightly longer and tapered to a point.

Both eyes were kept covered for eight days, drops being given daily. On January 29, 1944, the fundus was examined in bed. Two vitreous opacities were observed. Six daily injections of collosol iodine, C.I.N.S. were given intra-venously.

He was discharged from hospital on February 12, 1944, by which time the eye was almost free from redness. Vision was 6/24, improved by a lens to 6/18. The vitreous opacities were still present but considerably smaller. The operation scar could be seen as a broad white line with surrounding black pigmentation.

Discussion

The technique employed appeared to reduce the loss of vitreous to a minimum. The sutures in the sclera were used to suspend the eye as it were from two slings; to rotate the eye, to open and close the wound as required.

The use of a cataract knife to incise the sclera is a deliberate and controlled procedure. The insertion of sutures in the sclera before incising it is recommended. It has the additional advantage of enabling the wound to be closed immediately in case of necessity.

The magnification of a foreign body in the anterior layers of the vitreous is noteworthy. It is roughly three magnifications, and had this been appreciated beforehand, removal would not have been so light-heartedly undertaken.

ANNOTATIONS

Ophthalmology in the National Health Service

Ophthalmology and dentistry are classed more or less together in the White Paper now before the profession, and it is stated that there must be delay in reaching a stage at which general dental and ophthalmic services can be provided for all.

Appendix A contains a short summary of the existing ophthalmic services under the National Health Insurance scheme. Some 25 per cent. of the population are eligible for benefit. Spectacles can be obtained in one of two ways, either through a medical practitioner with special experience of ophthalmic work or through a sight-testing optician. A paragraph pays tribute to the excellent arrangements for ophthalmic treatment of school children which in the main is in the hands of specialists.

The government's aim is to provide a comprehensive health service for everybody in the country. They want to ensure that in future every man, woman and child can rely on getting all the advice and treatment and care which they may need in matters of